

Environmental Protection Agency

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shall submit to the Administrator a report which includes the following information:

(1) The location and description of the manufacturer's emission test facilities which were utilized to conduct testing reported pursuant to this section;

(2) The applicable standards against which the engines or vehicles were tested;

(3) Deterioration factors for the engine family to which the selected configuration belongs;

(4) A description of the engine or vehicle and any emission-related component selection method used;

(5) For each test conducted:

(i) Test engine or vehicle description, including;

(A) Configuration and engine family identification,

(B) Year, make and build date,

(C) Engine or vehicle identification number, and

(D) Number of hours of service accumulated on engine or number of miles on vehicle prior to testing;

(ii) Location where service or mileage accumulation was conducted and description of accumulation procedure and schedule;

(iii) Test number, date, initial test results before and after rounding, final test results and final deteriorated test results for all emission tests, whether valid or invalid, and the reason for invalidation, if applicable;

(iv) A complete description of any modification, repair, preparation, maintenance, and/or testing which was performed on the test engine or vehicle and has not been reported pursuant to any other paragraph of this subpart and will not be performed on all other production engines or vehicles; and

(v) Any other information the Administrator may request relevant to the determination as to whether the new heavy-duty engines or heavy-duty

vehicles being manufactured by the manufacturer do in fact conform with the regulations of this subpart; and

(6) The following statement and endorsement:

This report is submitted pursuant to section 206 of the Clean Air Act. This Production Compliance Audit was conducted in complete conformance with all applicable regulations under 40 CFR part 86 et seq. All data and information reported herein is, to the best of

(Company Name) 's knowledge, true and accurate. I am aware of the penalties associated with violations of the Clean Air Act and the regulations thereunder.

(Authorized Company Representative)

§ 86.1113-87 Calculation and payment of penalty.

(a) The NCP for each engine or vehicle for which a compliance level has been determined under § 86.1112-87 is calculated according to the formula in paragraph (a)(1) or (a)(2) of this section depending on the value of the compliance level. Each formula contains an annual adjustment factor (AAF_i) which is defined in paragraph (a)(3) of this section. Other terms in the formulas are defined in paragraph (a)(4) of this section.

(1) If the compliance level (CL) is greater than the standard and less than or equal to X (e.g., point CL₁ in figure 1), then:

$$NCP_n = (PR_1)(CL - S) \left(\prod_{i=1}^n AAF_i \right)$$

where:

$$PR_1 = (F) (MC_{50})$$

(2) If the compliance level is greater than X and less than or equal to the upper limit as determined by § 86.1104-87 (e.g., point CL₂ in figure 1), then:

$$NCP_n = (COC_{50} + (PR_2)(CL - X)) \left(\prod_{i=1}^n AAF_i \right)$$

where:

$$PR_2 = \frac{COC_{90} - COC_{50}}{UL - X}$$

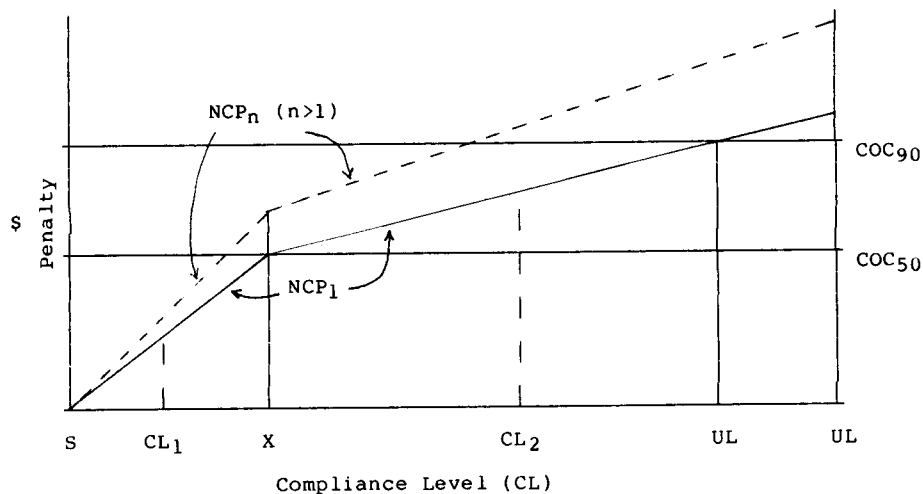
(3) AAF_i has the following values:

- (i) If $frac_{i-1} = 0$, then $AAF_i = 1 + I_{i-1}$
 (ii) If $frac_{i-1} > 0$, then:

$$AAF_i = 1 + I_{i-1} + A_i \left[\frac{1}{1 - frac_{i-1}} \right]^i$$

Figure 1

Penalty vs. Compliance Level



If $frac_{i-1} > 0.50$, then $frac_{i-1}$ will be set equal to 0.50.

(iii) $AAF_1 = 1$

(iv) In calculating the NCP for year n , the value $frac_{i-1}$ for $i = n$ will include actual NCP usage through March 31 of model year $n-1$ and EPA's estimate of additional usage for the remainder of model year $n-1$ using manufacturer input. All manufacturers using NCPs must report by subclass actual NCP and non-NCP production numbers through March 31, an estimate of NCP and non-NCP production for the remainder of the model year, and the previous year's actual NCP and non-NCP production to EPA no later than April 30 of the model year. If EPA is unable to obtain similar information from manufacturers not using NCPs, EPA will use projected sales data from the

manufacturers' application for certification in computing the total production of the subclass and the $frac_{i-1}$. The value of $frac_{i-1}$ will be corrected to reflect actual year-end usage of NCPs and a corrected AAF will be used to establish NCPs in future years. The correction of previous year's AAF will not affect the previous year's penalty.

(4) The terms in the above formulas have the following meanings and values, which may be determined separately for each subclass and pollutant for which an NCP is offered. The production of Federal and California designated engines or vehicles shall be combined for the purpose of this section in calculating the NCP for each engine or vehicle.

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NCP_n=NCP for year n for each applicable engine or vehicle

CL=Compliance level for year n for applicable engines or vehicles

S=Emission standard

UL=Upper limit as determined by section 86.1104-87, except that, if the upper limit is determined by section 86.1104-87(c), the value of UL in paragraph (a)(2) of this section shall be the prior emission standard for that pollutant.

UL'=Upper limit as determined by section 86.1104-87(c). This value is not used in the above formulas.

X=Compliance level above the standard at which NCP₁ equals COC₅₀

$$X = \frac{\text{COC}_{50}}{(F)(\text{MC}_{50})} + S$$

PR₁=Penalty rate when CL ≤ X

PR₂=Penalty rate when X < CL ≤ applicable upper limit

$$\prod_{i=1}^n \text{AAF}_i = \text{Running product, i.e., } (\text{AAF}_1) \times (\text{AAF}_2) \times \cdots \times (\text{AAF}_n)$$

i=An index representing a year. It represents the same year for both Federal and California designated engines or vehicles of the same production model year.

n=Index representing the number of model years for which the NCP has been available for an engine or vehicle subclass (i.e., n=1 for the first year that the NCP is available, and so on until n=n for the nth year that the NCP is available). The factor "n" is based on the model year the NCP is first available, as specified in section 86.1105-87 for the engine or vehicle subclass and pollutant for both Federal and California designated engines and vehicles.

COC₅₀=Estimate of the average total incremental cost to comply with the standard relative to complying with the upper limit.

COC₉₀=Estimate of the 90th percentile total incremental cost to comply with the standard relative to complying with the upper limit.

MC₅₀=Estimate of the average marginal cost of compliance (dollars per emission unit) with the standard.

F=Factor used to estimate the 90th percentile marginal cost based on the average marginal cost (the minimum value of F is 1.1, the maximum value of F is 1.3).

AAF_i=Annual adjustment factor for year i, frac_{i-1}=Fraction of engines or vehicles of a subclass using NCPs in previous year (year i-1).

A_i=Usage adjustment factor in year i: A_i=0.10 for i=2; A_i=0.08 for i<2.

I_i=Percentage increase in overall consumer price index in year i.

(5) The values of COC₅₀, COC₉₀, MC₅₀ and F will be determined for each applicable subclass by EPA based on the cost data used by EPA in setting the applicable emission standard. However, where the rulemaking to establish a specific NCP occurs after the rule-

making to establish the standard, EPA may augment the data base used to establish the standard by including the best cost and emission performance data available to EPA during the specific NCP rulemaking.

(6) In calculating the NCP, appropriate values of the following predefined terms should be used: CL, S, UL, F, and A_i. For all other terms, unrounded values of at least five figures beyond the decimal point should be used in calculations leading up to the penalty amount. Any NCP calculated under paragraph (a) of this section will be rounded to the nearest dollar in accordance with ASTM E29-67.

(b) The NCP determined in paragraph (a) of this section is assessed against all those engines or vehicles of the non-conforming configuration or engine family produced at all assembly plants and distributed into commerce—

(1) Since the beginning of the model year in the case of a certification failure described by § 86.1106-87(a).

(2) Beginning ten days after an SEA failure described by § 86.1106-87 (b) or (c).

(3) Following implementation of a production running change described by § 86.1106-87(d).

(c) The NCP will continue to be assessed during the model year, until such time, if any, that the configuration or engine family is brought into conformance with applicable emission standards.

(d) A manufacturer may carry over an NCP from a model year to the next

model year. There is no limit to the number of years that carryover can continue. The amount of the penalty will increase each year according to paragraph (a) of this section.

(e) The Administrator shall notify the manufacturer in writing of the nonconformance penalty established under paragraph (a) of this section after the completion of the PCA under § 86.1112-87.

(f) A manufacturer may request a hearing under § 86.1115-87 as to whether the compliance level (including a compliance level in excess of the upper limit) was determined in accordance with the procedures in § 86.1112-87(a) or whether the nonconformance penalty was calculated in accordance with the procedures in § 86.1113-87(a). If a nonconformance penalty has been established, such hearing must be requested within fifteen (15) days or such other period as may be allowed by the Administrator after the notification of the nonconformance penalty. If a manufacturer wishes to challenge a compliance level in excess of the upper limit, he must request a hearing within fifteen (15) days or such other period as may be allowed by the Administrator after the completion of the Production Compliance Audit.

(g)(1) Except as provided in paragraph (g)(2) of this section, the nonconformance penalty or penalties assessed under this subpart must be paid as follows:

(i) By the quarterly due dates, i.e., within 30 days of the end of each calendar quarter (March 31, June 30, September 30 and December 31), or according to such other payment schedule as the Administrator may approve pursuant to a manufacturer's request, for all nonconforming engines or vehicles produced by a manufacturer in accordance with paragraph (b) of this section and distributed into commerce for that quarter.

(ii) The penalty shall be payable to U.S. Environmental Protection Agency, NCP Fund, P.O. Box 360277M, Pittsburgh, PA 15251.

(2) When a manufacturer has requested a hearing under § 86.1115-87, it must pay the nonconformance penalty, and any interest, within ten days after the Presiding Officer renders his deci-

sion, unless the manufacturer first files a notice of intention to appeal to the Administrator pursuant to § 86.1115-87(t)(1), or, if an appeal of the Presiding Officer's decision is taken, within ten days after the Administrator renders his decision, unless the manufacturer first files a petition for judicial review.

(3) A manufacturer making payment under paragraph (g)(1) or (g)(2) of this section shall submit the following information by each quarterly due date to: Director, Manufacturers Operations Division, U.S. Environmental Protection Agency, 401 M Street SW., Washington, DC 20460. This information shall be submitted even if a manufacturer has no NCP production in a given quarter.

(i) Corporate identification, identification and quantity of engines or vehicles subject to the NCP, certificate identification (number and date), NCP payment calculations and interest payment calculations, if applicable.

(ii) The following statement and endorsement:

This information is submitted pursuant to section 206 of the Clean Air Act. All information reported herein is, to the best of

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(Company name)

knowledge, true and accurate. I am aware of the penalties associated with violations of the Clean Air Act and the regulations thereunder.

(Authorized Company Representative)

(4) The Administrator may verify the production figures or other documentation submitted under paragraph (g)(3) of this section.

(5)(i) Interest shall be assessed on any nonconformance penalty for which payment has been withheld under § 86.1113-87(g) (1) or (2). Interest shall be calculated from the due date for the first quarterly NCP payment, as determined under § 86.1113-87(g)(1), until either the date on which the Presiding Officer or the Administrator renders the final decision of the Agency under § 86.1115-87 or the date when an alternate payment schedule (approved pursuant to § 86.1113-87(g)(1)) ends.

(ii) The combined principal plus interest on each quarterly NCP payment withheld pursuant to § 86.1113-87(g) (1)

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or (2) shall be calculated according to the formula:

$$QNCP(1 + R).25n$$

where:

QNCP=the quarterly NCP payment

R=the interest rate applicable to that quarter

n=the number of quarters for which the quarterly NCP payment is outstanding.

(iii) The number of quarters for which payment is outstanding for purposes of this paragraph shall be the number of quarterly NCP payment due dates, as determined under § 86.1113-87(g)(1), which have elapsed throughout the duration of a hearing request, or alternate payment schedule.

(iv) The interest rate applicable to a quarter for purposes of this paragraph shall be the rate published by the Secretary of the Treasury pursuant to the Debt Collection Act of 1982 and effective on the date on which the NCP payment was originally due.

(6) A manufacturer will be refunded an overpayment, or be permitted to offset an overpayment by withholding a future payment, if approved in advance by the Administrator. The government shall pay no interest on overpayments.

(h) A manufacturer that certifies as a replacement for the nonconforming configuration, a configuration that is in conformance with applicable standards, and that performs a production compliance audit (PCA) in accordance with § 86.1112-87(a) that results in a compliance level below the applicable standard, will be eligible to receive a refund of a portion of the engineering and development component of the penalty. The engineering and development component will be determined by multiplying the base penalty amount by the engineering and development factor for the appropriate subclass and pollutant in § 86.1105-87. The amount refunded will depend on the model year in which the certification and PCA take place. In cases where payment of penalties have been waived by EPA in accordance with paragraph (g)(1)(iii) of this section, EPA will refund a portion of the engineering and development component. The proportionate refund to be paid by EPA will be based on the proportion of vehicles or engines of the nonconforming configuration for which

NCPs were paid to EPA. The refund is calculated as follows:

$$R_{\text{tot}} = D_n \times F_{\text{E\&D}} \times NCP_1 \times \text{Prod}_{\text{tot}}$$

$$R_{\text{Cal}} = (\text{Prod}_{\text{Cal}} / \text{Prod}_{\text{tot}}) \times (R_{\text{tot}})$$

$$R_{\text{EPA}} = R_{\text{tot}} - R_{\text{Cal}}$$

Where:

n=index representing the number of model years for which the NCP has been available for an engine or vehicle subclass (i.e., n=1 for the first year that NCPs are available, . . . , n=n for the nth year the NCPs are available; same as "n" in paragraph (a)(4)).

D_n=discount factor depending on the number of model years (n) for which NCPs were available at the time of certification and PCA of the replacement configuration, and its value is as follows:

$$D_1=0.90$$

$$D_2=0.79$$

$$D_3=0.67$$

$$D_4=0.54$$

$$D_5=0.39$$

$$D_6=0.23$$

$$D_7=0.05$$

$$D_n=0.00 \text{ for } n=8 \text{ or larger}$$

F_{E&D}=the engineering and development factor specified in section 86.1105-87 for the appropriate subclass and pollutant

NCP₁=the penalty for each engine or vehicle during the first (base) year the NCP is available as calculated in paragraph (a)

Prod_{tot}=total number of engines or vehicles produced in the subclass for which NCPs were paid to EPA or to the State of California

Prod_{Cal}=number of engines or vehicles in the subclass demonstrated to have been titled, registered or principally used in the State of California and for which NCPs were paid to the State of California under paragraph (g)(1)

R_{tot}=Total refund due to the manufacturer for the engineering and development component of the NCP

R_{Cal}=Refund due to the manufacturer from the State of California for the engineering and development component of the NCP

R_{EPA}=Refund due to the manufacturer from EPA for the engineering and development component of the NCP.

[50 FR 35388, Aug. 30, 1985, as amended at 50 FR 53467, Dec. 31, 1985; 53 FR 19134, May 26, 1988; 55 FR 46629, Nov. 5, 1990; 61 FR 51366, Oct. 2, 1996]

§ 86.1114-87 Suspension and voiding of certificates of conformity.

(a) The certificate of conformity is suspended with respect to any engine or vehicle failing pursuant to paragraph (f) of § 86.1112-87 effective from the time that a fail decision is made for that engine or vehicle.